

U.S. Department of the Interior  
Bureau of Land Management  
Little Snake Field Office  
455 Emerson Street  
Craig, CO 81625-1129

## ENVIRONMENTAL ASSESSMENT

**EA-NUMBER:** CO-100-2006-067 EA

**CASEFILE/PROJECT NUMBER/LEASE NUMBER:**

COC59258: Maybell Federal Well #9-7  
COC59259: Maybell Federal Well #12-9

**PROJECT NAME:** Two Maybell Wells

**LEGAL DESCRIPTION:** Both wells in Moffat County, Colorado

Maybell Federal Well #9-7: NESE Sec. 7, T7N, R95W, 6<sup>th</sup> PM  
Maybell Federal Well #12-9: SWSW Sec. 9, T7N, R95W, 6<sup>th</sup> PM

**APPLICANT:** Genesis Gas & Oil, LLC

**PLAN CONFORMANCE REVIEW:** The proposed action is subject to the following plan:

Name of Plans: Little Snake Resource Management Plan and Record of Decision (ROD) approved on April 26, 1989; and the Colorado Oil and Gas Leasing & Development Environmental Impact Statement (EIS) and the ROD signed on November 5, 1991.

Remarks: The proposed two Maybell Wells would be located within Management Unit 3 (Little Snake Resource Management Plan). The objectives of Management Unit 3 are to improve soil and watershed values, increase forage production, and enhance livestock grazing. Public lands are open to oil and gas development consistent with the management objectives.

The proposed action was reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The proposed action is in conformance with the objectives for this management unit.

**NEED FOR PROPOSED ACTION:** To provide for the development of oil and gas resources and to supply energy resources to the American public.

**PUBLIC SCOPING PROCESS:** The Notices of Staking (NOSs) have been posted in the public room of the Little Snake Field Office for a 30-day public review period beginning April

14, 2006 when the NOSs were received, and may be viewed during regular business hours (7:45 a.m. to 4:30 p.m.), Monday through Friday, except holidays.

**DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:** The proposed action is to approve two Applications for Permit to Drill (APDs) submitted by Genesis Gas & Oil, LLC. Genesis proposes to drill two gas wells on BLM administered land near Maybell, Colorado in T7N, R95W. Two APDs have been filed with the LSFO for the wells, the Maybell Federal Well #9-7 and the Maybell Federal Well #12-9. The APDs cover mitigation of impacts to vegetation, soil, surface water, and other resources. Mitigation not incorporated by Genesis in the drilling and surface use plans would be attached by the BLM as Conditions of Approval to the approved APDs.

The proposed wells would be located approximately 6 miles north of Maybell, Colorado. The approximate date work would start is the summer or fall of 2006 and the estimated duration of construction and drilling is 12 days. Moffat County Roads 19, 17, 7, and 8 would be used to access the well sites. Genesis proposes to construct or reconstruct approximately 15,425 feet of new road access, the majority of which follows an existing two-track road. New road construction and upgrading would conform to BLM specifications for a “resource road”, with a 14-foot wide running surface. Total surface disturbance for the new and upgraded access roads would be approximately 18 acres. In the event that a well is commercially productive, the access road would be upgraded to an all-weather road. The access road to the Maybell Federal Well #12-9 is located on State of Colorado surface and BLM. All road construction and upgrading would be on lease or private land and would not require a federal Right-of-Way.

The proposed well pads would be cleared of all vegetation and leveled for drilling. Topsoil and native vegetation would be stockpiled for use in reclamation. Approximately one-half acre (0.5) would be disturbed for construction of each of the well pads. This would include the 150’ by 125’ well pads, the topsoil and subsoil piles to be constructed at the well sites. No reserve pit will be constructed as the wells would be drilled with air. In the event of encountering water, a closed mud system on the drilling rig would be utilized. Cuttings from the closed mud system will be removed and hauled to a suitable upland disposal site. Any produced water would be held in a metal containment pit. If a gas well is a producer, cut portions of the well site would be backfilled and unused portions of the well site would be stabilized and re-vegetated. If a gas well proves unproductive, the well would be properly plugged and the entire well pad and new access road would be reclaimed. The upgraded portions of the road will remain in place.

Genesis did not include plans for a gas sales pipeline for the two Maybell Federal wells. A detailed written statement of work (Sundry Notice) would be filed with the BLM before pipeline installation for these wells. This Sundry Notice would be assessed, when it is received, for environmental impacts of a gas sales pipeline.

**NO ACTION ALTERNATIVE:** The “no action” alternative is that the wells would not be permitted and therefore no wells would be drilled. Genesis holds a valid and current oil and gas lease for the area where the proposed two Maybell Wells would be located. Under leasing contracts, the BLM has an obligation to allow mineral development if the environmental

consequences are not irreversible or too severe. The APD process is designed to overcome the no action situation of not accepting the APD through the mitigation of predicted environmental consequences. Since the proposed action is consistent with the ROD and the Oil and Gas Leasing EIS, rejecting the APDs for the wells was considered, but will not be analyzed further in this EA.

## **AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES**

### **CRITICAL RESOURCES**

#### **AIR QUALITY**

Affected Environment: There are no special designation air sheds or non-attainment areas nearby that would be affected by the proposed action.

Environmental Consequences: Short term, local impacts to air quality from dust would result during and after well pad construction. Drilling operations produce air emissions such as exhaust from diesel engines that power drilling equipment. Air pollutants could include nitrogen oxides, particulates, ozone, volatile organic compounds, fugitive natural gas, and carbon monoxide. The proposed action will not adversely affect the regional air quality.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 07/06/06

#### **AREA OF CRITICAL ENVIRONMENTAL CONCERN**

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer 06/26/06

### **CULTURAL RESOURCES**

Affected Environment: Cultural resources, in this region of Colorado, range from late Paleo-Indian to Historic. For a general understanding of the cultural resources in this area of Colorado, see An Overview of Prehistoric Cultural Resources, Little Snake Resource Area, Northwestern Colorado, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, An Isolated Empire, A History of Northwestern Colorado, Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and Colorado

Prehistory: A Context for the Northern Colorado River Basin, Colorado Council of Professional Archaeologists.

Environmental Consequences: The proposed projects, Maybell 4-7 and 12-9 well pads and access roads have undergone a Class III Cultural Resource Survey. The Addendum moved the location of Maybell 4-7, and renamed it Maybell 9-7. The new location has undergone a Class III Cultural Resource Survey.

McDonald, Kae

2006 Genesis Oil & Gas, LLC Maybell 4-7 and 12-9 well pads and access, Class III Cultural Resource Inventory BLM 154.1.06. Flattops Archaeological Consultants, LLC. Glenwood Springs, Colorado.

McDonald, Kae

2006 ADDENDUM TO: Maybell 4-7 and 12-9 well pads and access roads, Class III Cultural Resource Inventory, BLM 154.2.06. Flattops Archaeological Consultants, LLC. Glenwood Springs, Colorado.

The survey identified no eligible to the National Register of Historic Places prehistoric cultural resources. The proposed project may proceed as described in this EA with the following mitigative measures in place.

Mitigative Measures:

The following standard stipulations apply for this project:

1. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony.
- Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

2. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

Name of specialist and date: Gary D. Collins 06/26/06

## **ENVIRONMENTAL JUSTICE**

Affected Environment: The project would not directly affect the social, cultural, or economic well being and health of Native American, minority or low-income populations. The project area is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts from the project.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Louise McMinn 06/12/06

## **FLOOD PLAINS**

Affected Environment: No large floodplains are affected. The existing two-track road to the Maybell Federal Well #12-9 location crosses the active floodplain associated with an unnamed deeply entrenched ephemeral drainage in the S2 Section 17, T7N, R95W. The drainage will be crossed utilizing one large culvert and embankments. The company has adequately addressed the installation of this culvert in the APD and response to the 7-day letter.

Environmental Consequences: The floodplain does not currently have developments associated with it within the affected area. The access road to the Maybell Federal Well #12-9 will have very minimal effect on floodplain resources and floodplain function. No threat to human safety, life, welfare, and property will result from a properly constructed road crossing.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 07/06/06

## **INVASIVE, NONNATIVE SPECIES**

Affected Environment: Invasive species and noxious weeds occur within the affected area. Cheatgrass is common along road disturbances and other areas which do not have adequate perennial plant communities to inhibit its annual establishment; halogeton is also present and increasing in this area. Canada thistle and other biennial thistles are fairly common and can be established in the affected area, especially in road ditches. Russian knapweed and hoary cress (whitetop) have been found in the area near the proposed projects, as well as, leafy spurge near the Yampa River. Other species of noxious weeds are not known to be a problem in this area, but they can always be introduced by vehicle traffic, livestock and wildlife. The BLM, Moffat County, livestock operators, pipeline companies and oil and gas operators have formed the Northwest Colorado Weed Partnership to collaborate their efforts on controlling weeds and finding the best integrated approaches to achieve these results.

Environmental Consequences: The surface disturbing activities and associated traffic involved with drilling and operating the wells will create an environment and provide a mode of transport for invasive species and other noxious weeds to become established. Construction equipment and any other vehicles and equipment brought onto the site can introduce these weed species. Wind, water, recreation vehicles, livestock and wildlife will also assist with the distribution of weed seed into the newly disturbed areas. The operator will be required to control any invasive and/or noxious weeds that become established within the disturbed areas involved with drilling and operating the well. All principles of Integrated Pest Management should be employed to control noxious weeds on public lands.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 06/23/06

## **MIGRATORY BIRDS**

Affected Environment: Golden eagles are known to nest in the proposed project area. Several historical nests are located north of the 12-9 well. Between June 21-23 of 2006, a raptor nesting survey was conducted in the project area. Nine stick-built nests consistent with those used by golden eagles were found within one mile of the 12-9 well. Two of these nests were occupied by golden eagles at the time of the survey. One nest had two eaglets the second nest had one eaglet. It was estimated the eaglets would fledge within one week of the survey. Brewers sparrow and sage sparrow could potentially nest within sagebrush grasslands at this site as well.

Environmental Consequences: Disturbances associated with construction of the access road and well pad could disrupt nesting golden eagles and destroy brewers sparrows and sage sparrows nests if conducted during the nesting season (February 1 - August 15). Drilling activities could disrupt nesting and fledgling activities of golden eagles as well. If

the construction of the access road and well pad and the drilling of the well takes place once the eaglets have fledged, there is no chance of take to occur.

Mitigative Measures: No surface disturbing activities between February 1 and August 15 in order to protect nesting golden eagles.

Name of specialist and date: Timothy Novotny 07/10/06

## **NATIVE AMERICAN RELIGIOUS CONCERNS**

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council, and the Colorado Commission of Indian Affairs on January 21, 1999. The letter listed the projects that the BLM would notify them on and projects that would not require notification. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Gary D. Collins 06/26/06

## **PRIME & UNIQUE FARMLANDS**

Affected Environment: Not Present

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 07/06/06

## **T&E SPECIES – ANIMALS**

Affected Environment: There are no threatened, endangered or special status species or habitat for such species present in the project area.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 07/10/06

## **T&E SPECIES – PLANTS**

Affected Environment: There are no federally listed threatened or endangered plant species within or in the vicinity of the Proposed Action.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 06/07/06

### **T&E SPECIES - SENSITIVE PLANTS**

Affected Environment: There are no BLM sensitive plant species within or in the vicinity of the Proposed Action.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 06/07/06

### **WASTES, HAZARDOUS OR SOLID**

Affected Environment: If a release does occur, the environment affected would be dependent on the nature and volume of material released. If there are no releases, there will be no impact on the environment.

Environmental Consequences: Consequences will be dependent on the volume and nature of the material released. In most every situation involving hazardous materials, there are ways to remediate the area that has been contaminated. Short-term consequences will occur, but they can be remedied, and long-term impacts will be minimal.

Mitigative Measures: None

Name of specialist and date: Duane Johnson 05/24/06

### **WATER QUALITY/HYDROLOGY – GROUND**

Affected Environment: The two lithologic formations at the surface of this project are the Tertiary age Browns Park Formation and the Cretaceous age Lewis Formation. Fresh water zones within the Browns Park will be isolated from poorer quality water within the Williams Fork Formation by casing and cementing. The Lewis Formation is not expected to produce water. In both drill wells, near surface waters will be protected by the surface casing and cement behind pipe. Potable water is highly unlikely in this area. It is predicted that any produced water from the Williams Fork Formation coals will be of poor quality.

Environmental Consequences: With the use of proper construction practices, drilling practices, and with best management practices no significant adverse impact to groundwater aquifers and quality is anticipated to result from the proposed action. A geologic and



engineering review was performed on the 8-point drilling plan to ensure that the cementing and casing programs adequately protect the downhole resources.

Mitigative Measures: None

Name of specialist and date: Robert Ernst 07/11/06

## **WATER QUALITY/HYDROLOGY – SURFACE**

Affected Environment: The project well sites are located on wooded, gently sloping hillsides. Runoff water affected by this project would flow in a southerly direction through unnamed tributaries of the Yampa River. All stream segments within the affected environment are presently supporting their classified uses.

Environmental Consequences: The Maybell Federal Well #12-9 location would require upgrading to an existing two-track for approximately 15,425 feet. An unnamed, deeply entrenched tributary of the Yampa River will be crossed utilizing one large culvert and embankments. Construction of the road, well pad, and installation of drainage features should follow the private landowner's specifications and the recommendations provided in the Surface Operating Standards for Oil and Gas Development, 4th Edition.

Runoff water from the well sites and access roads would drain towards unnamed ephemeral tributaries of the Yampa River. Localized increases in water turbidity and contamination due to fluid leaks or spills from equipment are potential impacts to waterways as a result of the project. Increased sedimentation to the Yampa River during spring runoff or from high intensity summer/fall rainstorms would be the greatest potential impact to water quality. Although some sediment may be transported off site and eventually reach perennial waters, the mitigation provided in the Surface Use Plan and the Conditions of Approval will reduce the potential impacts caused by surface runoff.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 07/06/06

## **WETLANDS/RIPARIAN ZONES**

Affected Environment: There are no wetlands or riparian zones present in the proposed project area.

Environmental Consequences: None

Mitigative Measures: None

Mitigative Measures: Timothy Novotny 07/10/06

## **WILD & SCENIC RIVERS**

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer 06/26/06

## **WILDERNESS, WSAs**

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable.

Name of specialist and date: Jim McBrayer 06/26/06

## **NON-CRITICAL ELEMENTS**

### **FLUID MINERALS**

Affected Environment: The proposed action is in favorability zone 4 (highest for oil and gas potential). The proposed well will penetrate the Browns Park, Lewis, Williams Fork and Trout Creek Formations.

Coal seams encountered within the Williams Fork Formation will be at a depth of over approximately 1,800' and 2,200' below the surface and could have a net coal thickness of over 10 feet. If encountered the Williams Fork Formation coals would be too deep to be economically mined.

Environmental Consequences: The cementing and casing program will be adequate to protect any of the anticipated coals.

Mitigative Measures: None

Name of specialist and date: Robert Ernst 07/11/06

### **PALEONTOLOGY**

Affected Environment: The two geologic formations at the surface are the Cretaceous Lance Formation (Kla) and the Tertiary Age formation Browns Park Formation (Tbp). The Lance Formation is a resistant light-gray and yellowish-brown sandstone, siltstone, shale, and coal.

Thickness is estimated at about 150 m. Kla has been classified as a Class I formation for the potential for occurrence of scientifically significant fossils. Tbp is a Miocene age formation and lithologically is a white, light-gray, and tan, poorly to moderately consolidated, generally crossbedded, tuffaceous sandstone with subordinate conglomerate, siltstone, white crystal-poor rhyolitic air-fall tuff, and minor limestone. Mostly of fluvial and eolian origin and is characterized by abundant volcanic clastic material. Especially near base Tbp may contain red, orange, and yellow beds with abundant clasts of the Uinta Mountain Group (Yu) and subordinate Paleozoic limestone. Tbp has been deposited mostly north and east of the Uinta Mountains. Maximum thickness is highly variable but is considered to be about a maximum of 500 meters. This formation has been classified a Class Ia formation for the potential for occurrence of scientifically significant fossils. A Class Ia paleontological classification will apply for this proposed action.

Environmental Consequences: Scientifically significant fossils are found abundantly within these two formations (Armstrong & Wolney, 1989). The potential for discovery of significant fossils within both Kla and Tbp formations is considered to be high; however, potential for discovery of fossils through a surface survey on this location is considered low because of the specific facies of the Class Ia Browns Park Formation. Potential for buried fossils is considered moderate to low. If any such fossils are located here, construction activities could damage the fossils and the information that could have been gained from them would be lost. The significance of this impact would depend upon the significance of the fossil. The proposed action could also constitute a beneficial impact to Paleontological resources by increasing the chances for discovery of scientifically significant fossils.

Mitigative Measures: Ceasing operations and notifying the Field Office Manager immediately upon discovery of a fossil during construction activities will effectively mitigate the potential impact to Paleontological resources. An assessment of the significance is made and a plan to retrieve the fossil or the information from the fossil is developed.

#### Standard Discovery Stipulation

"If cultural or Paleontological resources are discovered during exploration operations under this license, the licensee shall immediately notify the Field Office Manager and shall not disturb such discovered resources until the Field Office Manager issues specific instructions.

- a. Within 5 working days after notification, the Field Office Manager shall evaluate any cultural resources discovered and shall determine whether any action may be required to protect or to preserve such discoveries.
- b. The cost of data recovery for cultural resources discovered during exploration operations shall be borne by the licensee, if the licensee is ordered to take any protective measures. Ownership of cultural resources discovered shall be determined in accordance with applicable law."

#### References

Armstrong, Harley J. and Wolney, David G., 1989, Paleontological Resources of Northwest Colorado: A Regional Analysis, Museum of Western Colorado, Grand Junction, CO, prepared for Bur. Land Management, Vol. I of V.

Miller, A.E., 1977, Geology of Moffat County, Colorado, Colo. Geol. Surv. Map Series 3, 1:126,720.

Name of specialist and date: Robert Ernst      06/06/06

## **SOILS**

**Affected Environment:** The proposed Maybell Wells would be located within the Forelle-Evanot complex and the Grieves-Crestman complex soil-mapping units. These very deep, well-drained soils are found on benches and hillslopes. Slopes within these units average 1 to 40 percent. The access road to the Maybell Federal Well #12-9 crosses various soil-mapping units.

**Environmental Consequences:** The construction and operation of the Maybell Wells would affect soils within and immediately adjacent to the proposed area of disturbance. The access road for the Maybell Federal Well #12-9 was modified slightly at the onsite to reduce soil erosion into two unnamed ephemeral tributaries of the Yampa River.

Increased soil erosion from wind and water would occur during construction of the well pads and access roads. Erosion would continue throughout the operational life of the wells. Loss of topsoil, soil compaction, and possible increases in sediment loads to drainages are impacts most likely to occur. Vegetation and soil would be removed from approximately nineteen (19) acres of land. Soil productivity would decline due to reduced soil microbial activity, impaired water infiltration, mixing of soil horizons, top soil loss, and introduction of weeds. Soil loss from construction would be greatest shortly after project start and would decrease in time as a result of stabilization through revegetation and reclamation of disturbed areas. Soil erosion would be reduced to an acceptable level with the mitigation described in the Surface Use Plan and Conditions of Approval in the approved APD. This mitigation will reduce the potential to have excessive sediments and salts in runoff water from the well site.

**Mitigative Measures:** Additional mitigative measures will be employed to prevent or reduce accelerated erosion if it begins to occur within or on constructed drainage and diversion ditches or surface drainages affected by the roads or well pads.

Name of specialist and date: Barb Blackstun      07/06/06

## TRANSPORTATION

**Affected Environment:** The existing access road to the well 12-9 site crosses two areas needing special construction work to provide a safe driving surface and protect soil and water resources. These areas of the road were discussed with the proponent during the on-site visit. The first is the major drainage that the existing road crosses. The second stretch of road is in the drainage below the well site.

**Environmental Consequences:** Failure to adequately construct the road through these sections of road can lead to unacceptable road rutting, soil erosion, and sediment loading downstream into the Yampa river system.

**Mitigative Measures:** The first section of existing road crossing the major drainage needs to be moved upstream about 100 feet. This crossing was located with flagging during the on-site. A professional engineering firm needs to size this culvert based on 'Gold Book' requirements. The second section of road needs re-located about 30 feet to the west, or uphill out of the drainage bottom. It will also need gravel surfacing to better stabilize the road travelway surface.

Name of specialist and date: Rob Schmitzer 06/19/06

## VEGETATION

**Affected Environment:** The Proposed Actions are located in a Juniper/sagebrush-native grass community. Dominant plants in this community include juniper (*Juniperus scopulorum*), big sage (*Artemisia tridentata*), Indian ricegrass (*Stipa hymenoides*), needleandthread (*Hesperostipa comata*), thickspike wheatgrass (*Agropyron dasystachyum*), western wheatgrass (*Agropyron smithii*), and prairie junegrass (*Koeleria pyramidata*), winterfat (*Ceratoides lanata*) was also observed.

**Environmental Consequences:** The Proposes Action to construct or reconstruct approximately 15,425 feet of new road access, the majority of which follows an existing two-track road. New road construction and upgrading would conform to BLM specifications for a "resource road", with a 14-foot wide running surface. Total surface disturbance for the new and upgraded access roads would be approximately 18 acres.

Approximately one-half acre (0.5) would be disturbed for construction of each of the well pads. This would include the 150' by 125' well pads, the topsoil and subsoil piles to be constructed at the well sites. The total disturbance caused by road improvements and well pad construction would be approximately nineteen acres, but would not jeopardize the greater herbaceous community, as long as appropriate weed management practices are employed. Appropriate weed management practices are critical to the integrity of the surrounding plant community

The No Action Alternative is that the well will not be permitted and therefore the well will not be drilled.

Mitigative Measures: None

Name of specialist and date: Amy Ruhs 06/29/06

## **WILDLIFE, AQUATIC**

Affected Environment: There is no aquatic wildlife habitat present in the project area.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 07/10/06

## **WILDLIFE, TERRESTRIAL**

Affected Environment: The proposed project area is within juniper woodlands with sagebrush and mountain shrub meadows. This area provides year round habitat for mule deer and elk including severe winter range for both species. The area also provides habitat for a variety of small mammals, birds and reptiles.

Environmental Consequences: Impacts to wildlife species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include, but are not limited to, displacement into less suitable habitat, increased stress, and loss of habitat. These impacts are more significant during critical seasons, such as winter or reproduction. All wildlife species using the area are likely to be displaced during construction and drilling activities and may find the project area less suitable once construction is complete.

Most small mammals using the project area would be capable of avoiding construction equipment and should not be directly harmed by these activities. Some burrowing animals may be killed by construction equipment. This should be considered a short-term negative impact that is not likely to harm populations of any species.

Mitigative Measures: CO-9 no surface disturbing activities will be permitted between December 1 and April 30 in order to protect wintering mule deer and elk from disturbance.

Name of specialist and date: Timothy Novotny 07/10/06

**OTHER NON-CRITICAL ELEMENTS:** For the following elements, those brought forward for analysis will be formatted as shown.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Fluid Minerals			See Fluid Minerals
Forest Management		BB 07/06/06	
Hydrology/Ground		RE 07/11/06	
Hydrology/Surface		BB 07/06/06	
Paleontology			See Paleontology
Range Management		AR 06/29/06	
Realty Authorizations		LM 06/13/06	
Recreation/Transportation			See Transportation
Socio-Economics		LM 06/12/06	
Solid Minerals		RE 06/06/06	
Visual Resources		JM 06/26/06	
Wild Horse & Burro Mgmt	BB 07/06/06		

**CUMULATIVE IMPACTS SUMMARY:** Cumulative impacts may result from the development of the two Maybell Federal wells when added to non-project impacts that result from past, present, and reasonably foreseeable future actions. The potential exists for future oil and gas development throughout the area. Currently no wells exist within a one-mile radius of the proposed wells. Past or existing actions near the project area that would influence the landscape include wildfire, recreation, hunting, grazing, and ranching activities.

Surface disturbance associated with oil and gas activity would increase the potential for erosion and sedimentation. Only a small reduction in available forage would be anticipated. Some wildlife species may be temporarily displaced by construction at the well sites and access roads, but should return once construction is completed. Displacement of hunters and recreationists during the short-term construction and drilling periods would occur. Contrasts in line, form, color, and texture from development would impact the visual qualities on the landscape.

The cumulative effects of projected oil and gas development are minimized through Best Management Practices identified in the Surface Use Plan of the APD and the BLM required mitigation in the Conditions of Approval for the APD. Proper construction and drilling practices must comply with federal and state environmental regulations. All oil and gas wells in the area would be completed in accordance with Onshore Order No. 2. Reasonably foreseeable mineral development would occur under the guidelines of the Little Snake Resource Management Plan and the Colorado Oil and Gas Leasing and Development EIS.

## **STANDARDS:**

**PLANT AND ANIMAL COMMUNITY (animal) STANDARD:** The proposed project area provides productive habitat for a variety of big game, small mammals, birds and reptiles. Habitat conditions in the project area are considered good and are currently capable of supporting healthy wildlife populations. The disturbance associated with the development of these wells will likely result in a short-term displacement of wildlife from the project area. Once construction is complete, many will return to the project area but may avoid use of the well pads. Surrounding habitat that will remain undisturbed should be sufficient to support displaced wildlife. This standard is currently being met and will continue to be met in the future.

Name of specialist and date: Timothy Novotny 07/10/06

**SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD:** There are no threatened, endangered, or special status species present in the project area. This standard does not apply.

Name of specialist and date: Timothy Novotny 07/10/06

**PLANT AND ANIMAL COMMUNITY (plant) STANDARD:** The plant communities impacted by the Proposed Action are currently meeting this standard. Plant diversity, vigor, abundance, and reproductive capability are currently at levels that ensure resilience in the plant community to human activities. Weeds must be addressed and all principles of invasive weeds control should be employed. Given this mitigation measure, the Proposed Action would meet this standard. The No Action Alternative would also meet this standard because the disturbances would not occur.

Name of specialist and date: Amy Ruhs 06/29/06

**SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant) STANDARD:** There are no federally listed threatened or endangered or BLM sensitive plant species within or in the vicinity of the Proposed Action. This standard does not apply.

Name of specialist and date: Hunter Seim 06/07/06

**RIPARIAN SYSTEMS STANDARD:** There are no wetlands or riparian systems present in the proposed project area. This standard does not apply.

Name of specialist and date: Timothy Novotny 07/10/06

**WATER QUALITY STANDARD:** The proposed action would meet the public land health standard for water quality. Interim reclamation of the unused area on the well pads will be completed to minimize sheet and rill erosion from the well sites. When the well pads are no longer needed for production operations, the disturbed area would be reclaimed to approximate



original contours, topsoil would be redistributed, and adapted plant species would be reseeded. These Best Management Practices would help to reduce accelerated erosion of the sites. No stream segments near this project are listed as impaired.

Name of specialist and date: Barb Blackstun 07/06/06

**UPLAND SOILS STANDARD:** : The proposed action will not meet the upland soil standard for public land health, but it is not expected to while the well pads and access roads are used for operations. The disturbed area will not exhibit the characteristics of a healthy soil. Several Best Management Practices have been designed into the project that will reduce impacts to and conserve soil materials. Upland soil health will return to the well pads and access roads after the disturbed area has been successfully reclaimed.

Name of specialist and date: Barb Blackstun 07/06/06

**PERSONS/AGENCIES CONSULTED:** Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office.

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)**  
**EA CO-100-2006-067**

Based on the analysis of potential environmental impacts contained in the EA and all other available information, I have determined that the proposal and the alternatives analyzed do not constitute a major Federal action that would adversely impact the quality of the human environment. Therefore, an EIS is unnecessary and will not be prepared. This determination is based on the following factors:

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests, or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.
2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.
3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas, or designated Areas of Critical Environmental Concern.
4. There are no highly controversial effects on the environment.
5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.
6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State, or local natural resource related plans, policies, or programs.
7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.
8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.

9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.

10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

**DECISION AND RATIONALE:** I have determined that approving the two Maybell Well APDs is in conformance with the approved land use plan. It is my decision to implement the project with the mitigation measures provided in the Application for Permit to Drill and the Conditions of Approval. The project will be monitored as stated in the Compliance Plan outlined below.

**MITIGATION MEASURES:** The mitigation measures for this project are found in the file room of the Little Snake Field Office. The APD's 13-point surface use plan, well location maps, and the Conditions of Approval are found in the well's case file labeled COC59258, Well #9-7 and COC59259, Well #12-9.

### **COMPLIANCE PLAN(S):**

#### **Compliance Schedule**

Compliance will be conducted during the construction phase and drilling phase to insure that all terms and conditions specified in the leases and the approved APDs are followed. In the event a producing well is established, periodic inspections as identified through the Inspection and Enforcement Strategy and independent well observations will be conducted. File inspections will include a review of all required reports and the Monthly Report of Operations will be evaluated for accuracy.

#### **Monitoring Plan**

The well locations and access roads will be monitored during the term of the leases for compliance with pertinent Regulations, Onshore Orders, Notices to Lessees, or subsequent COAs until final abandonment is granted; monitoring will help determine the effectiveness of mitigation and document the need for additional mitigative measures.

#### **Assignment of Responsibility**

Responsibility for implementation of the compliance schedule and monitoring plan will be assigned to the Fluid Mineral staff in the Little Snake Field Office. The primary inspector will be the Petroleum Engineering Technician, but the Petroleum Engineer, Natural Resource Specialist, Realty Specialist, and Legal Instruments Examiner will also be involved.

**SIGNATURE OF PREPARER: Barb Blackstun**

**DATE SIGNED: 07/14/06**

**SIGNATURE OF ENVIRONMENTAL REVIEWER: Duane Johnson**

**DATE SIGNED: 07/14/06**

**SIGNATURE OF AUTHORIZED OFFICIAL:**

**DATE SIGNED:**